Appendix D

Risk Data Tables

Appendix D
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Table D-1. Summary of Data Available for Potential Release Sites Within CFA (WAG 4).

OU	Site Code	Site Description	Suspected Contaminants	Data Available	Source of Information
4-01	CFA-09	Central Gravel Pit	None	Field inspection and screening indicated no source.	Interim action, ROD
	CFA-11	French Drain (containing 5-in. shell) N. of CFA-633	None	Field inspection and screening indicated no source.	Interim action, ROD
4-02	CFA-13	Dry Well (South of CFA-640)	Metals, VOCs, SVOCs, PCBs, petroleum products, radionuclides	Confirmatory soil samples following removal indicated chromium and 1,1,2-trichloro-1,2,2-trifluoroethane occurred at 0.15 to 1.5 m (0.5 to 5 ft) bgs.	Track-1 Decision Document, 1997 Non-Time Critical Removal Action Analytical Data
	CFA-14	Two Dry Wells (CFA-665)	None	Field inspection and screening indicated no source.	Track-1 Decision Document
	CFA-15	Dry Well (CFA-674)	Metals, VOCs, SVOCs, PCBs, pesticides, radionuclides	Confirmatory soil samples following removal indicated metals and radionuclides at 0.6 to 4.9 m (2 to 16 ft) bgs.	Track-1 Decision Document, 1997 Non-Time Critical Removal Action Analytical Data
	CFA-16	Dry Well (South of CFA-682 Pumphouse)	None	Field inspection and screening indicated no source.	Track-1 Decision Document
4-03	CFA-18	Fire Department Training Area, Oil Storage Tanks	None	Field inspection and screening indicated no source.	Track-1 Decision Document, ROD
	CFA-19	Gasoline Tanks (2) East of CFA-606	None	Field inspection and screening indicated no source.	Track-1 Decision Document, ROD
	CFA-20	Fuel Oil Tank at CFA-609 (CFA-732)	None	Field inspection and screening indicated no source.	Track-1 Decision Document, ROD
	CFA-21	Fuel Tank at Nevada Circle 1 (South by CFA-629)	BTEX, TPH	Confirmatory soil samples during tank removal indicated residual TPH at 2.3 m (7.6 ft) bgs.	Track-1 Decision Document, ROD
	CFA-22	Fuel Oil Tank at CFA-640	BTEX, TPH, VOCs	Confirmatory soils samples during and after tank removal indicated TPH at 2.7 m (9 ft) and, 2-butanone, tetrachloroethane, & xylene from 5-5.1 m (16.5 to 16.8 ft) bgs.	Track-2 Decision Document
	CFA-23	Fuel Oil Tank at CFA-641	BTEX, TPH	Confirmatory soil samples during tank removal indicated toluene and TPH at 1.8 m (6 ft) bgs.	Track-1 Decision Document, ROD

Table D-1. Summary of Data Available for Potential Release Sites Within CFA (WAG 4).

OU	Site Code	Site Description	Suspected Contaminants	Data Available	Source of Information
	CFA-24	Fuel Tank at Nevada Circle 2 (South by CFA-629)	BTEX, TPH	Confirmatory soil samples during tank removal indicated TPH at 2.3 m (7.6 ft) bgs.	Track-1 Decision Document, ROD
	CFA-25	Fuel Oil Tank at CFA-656 (North Side)	BTEX, TPH	Confirmatory soil samples during tank removal indicated TPH at 2.7 m (9 ft) bgs.	Track-1 Decision Document, ROD
	CFA-27	Fuel Oil Tank at CFA-669 (CFA-740)	BTEX, TPH	Confirmatory soil samples during tank removal indicated BTEX and TPH at 2.7 m (9 ft) bgs.	Track-1 Decision Document, ROD
	CFA-28	Fuel Oil Tank at CFA-674 (West)	BTEX, TPH	Confirmatory soil samples during tank removal indicated TPH at 2.4 to 2.7 m (8 to 9 ft) bgs.	Track-1 Decision Document, ROD
	CFA-29	Waste Oil Tank at CFA-664, active	BTEX, TPH	Confirmatory soil samples during tank removal indicated TPH in subsurface soils.	Track-1 Decision Document, ROD
	CFA-30	Waste Oil Tank at CFA-665, active	BTEX, TPH	Confirmatory soil samples during tank removal indicated TPH at 2.7 m (9 ft) bgs.	Track-1 Decision Document, ROD
	CFA-31	Waste Oil Tank at CFA-754, active	BTEX, TPH, Trichloroethene	Confirmatory soil samples during tank removal indicated TPH at 4.6 to 5.5 m (15 to 18 ft) bgs.	Track-1 Decision Document, ROD
	CFA-32	Fuel Tank at CFA-667 (North Side)	BTEX, TPH	Confirmatory soil samples during tank removal indicated TPH at 0.3 to 1.8 m (1 to 6 ft) bgs.	Track-1 Decision Document, ROD
	CFA-33	Fuel Tank at CFA-667 (South Side)	BTEX, TPH	Field inspection and screening indicated no contamination.	Track-1 Decision Document, ROD
	CFA-34	Diesel Tank at CFA-674 (South)	BTEX, TPH	Confirmatory soil samples during tank removal indicated TPH in subsurface soils.	Track-1 Decision Document, ROD
	CFA-35	Sulfuric Acid Tank at CFA-674 (West Side)	None	Field inspection and screening indicated no source.	Track-1 Decision Document, ROD
	CFA-36	Gasoline Tank at CFA-680	BTEX, TPH	Field inspection and screening indicated no contamination.	Track-1 Decision Document, ROD
	CFA-37	Diesel Tank at CFA-681 (South Side)	BTEX, TPH	Confirmatory soil samples during tank removal indicated TPH at 2.7 m (9 ft) bgs.	Track-1 Decision Document, ROD
	CFA-38	Fuel Oil Tank, CFA-683	BTEX, TPH	Confirmatory soil samples during tank removal indicated BTEX and TPH less than 3 m (10 ft) bgs.	Track-1 Decision Document, ROD

Table D-1. Summary of Data Available for Potential Release Sites Within CFA (WAG 4).

OU	Site Code	Site Description	Suspected Contaminants	Data Available	Source of Information
	CFA-45	Underground Storage Tank	BTEX, TPH	Confirmatory soil samples during tank removal indicated BTEX and TPH at 5.9 m (19.5 ft) bgs.	Track 1/Track-2 Decision Document
4-04	CFA-39	"Drum Dock" (CFA-771)	None	Field inspection and screening indicated no source.	Track-1 Decision Document
	CFA-40	Returnable Drum Storage—South of CFA-601	TPH	Sampling and analysis data indicated TPH at 0 to 0.15 m (0 to 0.5 ft) bgs.	Track-1 Decision Document
	CFA-41	Excess Drum Storage—South of CFA-674	TPH	Sampling and analysis data indicated TPH at 0 to 0.15 m (0 to 0.5 ft) bgs.	Track-1 Decision Document
4-05	CFA-04	Pond (CFA-674)	Metals, radionuclides, PCBs, VOCs, SVOCs	Sampling and analysis data indicated arsenic, mercury, U-234, and U-238 as COPCs.	Track-2 Decision Document, 1997 Data Characterization Analytical Data
	CFA-17/47	Fire Department Training Area (bermed) and Fire Station Chemical Disposal	Metals, PAHs, PCBs, VOCs, SVOCs	Sampling and analysis data indicated Aroclor-1260, arsenic, benzo(b)fluoranthene, benzo(g,h,i) perylene, lead, and phenanthrene as COPCs.	Track-2 Decision Document, 1997 Non-Time Critical Removal Action Analytical Data
	CFA-50	Shallow Well East of CFA-654	Metals, VOCs, radionuclides	Sampling and analysis data indicated Cs-137, selenium, and lead at 1.8 to 2.1 m (6 to 7 ft) bgs.	Track-1/ Track-2 Decision Document
4-06	CFA-06	Lead Shop (outside areas)	Metals	Confirmatory soil samples during removal indicated lead and arsenic at 0 to 0.15 m (0 to 0.5 ft) bgs.	Track-2 Decision Document
	CFA-43	Lead Storage Area	Metals	Confirmatory soil samples during removal indicated lead and antimony at 0 to 0.15 m (0 to 0.5 ft) bgs.	Track-2 Decision Document
	CFA-44	Spray Paint Booth Drain (CFA-654)	Lead	Screening soil samples indicated lead at 0 to 2.7 m (0 to 9 ft) bgs.	Track-2 Decision Document
4-07	CFA-07	French Drains E/S (CFA-633)	Metals, radionuclides, VOCs, SVOCs, PAHs	Sampling and analysis data indicated Cs-137, lead, and Pu-238 as COPCs.	Track-1/ Track-2 Decision Document
	CFA-12	French Drains (2) (CFA-690)	VOCs, SVOCs, radionuclides	Sampling and analysis data indicated Am-241, Ba-133, Cs-137, and U-238 as COPCs.	Track-1/ Track-2 Decision Document

Table D-1. Summary of Data Available for Potential Release Sites Within CFA (WAG 4).

OU	Site Code	Site Description	Suspected Contaminants	Data Available	Source of Information
	CFA-48	Chemical Washout South of CFA-633	Metals, radionuclides	Confirmatory soil sample following removal indicated Cs-137, lead, and mercury at 0 to 0.15 m (0 to 0.5 ft) bgs.	Track-2 Decision Document
4-08	CFA-08	Sewage Plant (CFA-691), Septic Tanks (CFA-716) and Drainfield	Metals, radionuclides, PCBs, VOCs, PAHs, pesticides, herbicides	Sampling and analysis data for metals, radionuclides, PCBs and organics indicated Cs-137 and Pu-239/240 as COPCs.	Track-2 Decision Document, 1997 Data Characterization Analytical Data
	CFA-49	Hot Laundry Drain Pipe	Radionuclides, VOCs, PAHs, PCBs, metals	Confirmatory soil samples indicated Co-60, Ra-226, and U-235 at 8.1 to 8.3 m (26.5 to 27.25 ft) bgs.	Track-2 Decision Document
4-09	CFA-10	Transformer Yard Oil Spills	Metals, PCBs	Sampling and analysis data indicated lead as a COPC.	Track-2 Decision Document
	CFA-26	CFA-760 Pump Station Fuel Spill	VOCs, PAHs, TPH	Sampling and analysis data indicated chlorodifluoromethane, phenol, di-n-butylphthalate, and TPH-diesel as COPCs.	Track-2 Decision Document
	CFA-42	Tank Farm Pump Station Spills	PAHs, VOCs	Sampling and analysis data indicated 2-methylnaphthalene and phenanthrene as COPCs.	Track-2 Decision Document, 1997 Non-Time Critical Removal Action Analytical Data
	CFA-46	Cafeteria Oil Tank Spill (CFA-721)	BTEX, TPH	Sampling and analysis data indicated BTEX, TPH-gasoline and TPH-diesel as COPCs.	Track-2 Decision Document
4-10	CFA-01	Landfill I	PAHs, metals	Contamination has been contained and will be continually monitored.	Track-2 Decision Document
4-11	CFA-05	Motor Pool Pond	VOCs, metals, radionuclides, PCBs	Sampling and analysis data indicated Ac-228, Am-241, arsenic, Bi-212, Bi-214, lead, Pb-212, Ra-226, and Tl-208 as COPCs.	RI/FS Decision Document, ROD
4-12	CFA-01	Landfill I	PAHs, metals	Contamination has been contained and will be continually monitored.	RI/FS Decision Document, ROD
	CFA-02	Landfill II	PAHs, metals	Contamination has been contained and will be continually monitored.	RI/FS Decision Document, ROD
	CFA-03	Landfill III	PAHs, metals	Contamination has been contained and will be continually monitored.	RI/FS Decision Document, ROD

Table D-1. Summary of Data Available for Potential Release Sites Within CFA (WAG 4).

OU	Site Code	Site Description	Suspected Contaminants	Data Available	Source of Information
4-13	CFA-51	Drywell at North end of CFA-640	Metals, PCBs, radionculides, SVOCs, PAHs	Screening soil samples indicated lead and Aroclor-1254 at 0.3 to 0.8 m (1 to 2.5 ft) bgs.	RI/FS Decision Document, New Site Identification
	CFA-52	Diesel Fuel UST (CFA-730) at Bldg CFA-613 Bunkhouse	VOCs, TPH	Sampling and analysis data indicated PCE, 1,1,1-TCA, and TPH-diesel as COPCs.	RI/FS Decision Document, New Site Identification

Table D-2. Summary of Potential Release Sites Retained or Eliminated for the OU 4-13 Cumulative Risk Assessment

OU	Site Code	Site Description	Type of Investigation	Eliminate/Retain for COPC Screen?	Reason for Elimination
4-01	CFA-09	Central Gravel Pit	Interim Action	Eliminate	No Further Action ROD
	CFA-11	French Drain (with 5-in. shell) N. of CFA-633	Interim Action	Eliminate	No Further Action ROD
4-02	CFA-13	Dry Well (South of CFA-640)	Track-1	Retain for COPC Screen [a]	NA
	CFA-14	Two Dry Wells (CFA-665)	Track-1	Eliminate	No Further Action Track 1 Decision Document
	CFA-15	Dry Well (CFA-674)	Track-1	Retain for COPC Screen [a]	NA
	CFA-16	Dry Well (South of CFA-682 Pumphouse)	Track-1	Eliminate	No Further Action Track 1 Decision Document
4-03	CFA-18	Fire Department Training Area, Oil Storage Tanks	Track-1	Eliminate	No Further Action Track 1 Decision Document, ROD
	CFA-19	Gasoline Tanks (2) East of CFA-606	Track-1	Eliminate	No Further Action Track 1 Decision Document, ROD
	CFA-20	Fuel Oil Tank at CFA-609 (CFA-732)	Track-1	Eliminate	No Further Action Track 1 Decision Document, ROD
	CFA-21	Fuel Tank at Nevada Circle 1 (South of CFA-629)	Track-1	Eliminate	No Further Action Track 1 Decision Document, ROD
	CFA-22	Fuel Oil Tank at CFA-640	Track-2	Eliminate	No Further Action Track 2 Decision Document
	CFA-23	Fuel Oil Tank at CFA-641	Track-1	Eliminate	No Further Action Track 1 Decision Document, ROD

Table D-2. Summary of Potential Release Sites Retained or Eliminated for the OU 4-13 Cumulative Risk Assessment

OU	Site Code	Site Description	Type of Investigation	Eliminate/Retain for COPC Screen?	Reason for Elimination
	CFA-24	Fuel Tank at Nevada Circle 2 (South of CFA-629)	Track-1	Eliminate	No Further Action Track 1 Decision Document, ROD
	CFA-25	Fuel Oil Tank at CFA-656 (North Side)	Track-1	Eliminate	No Further Action Track 1 Decision Document, ROD
	CFA-27	Fuel Oil Tank at CFA-669 (CFA-740)	Track-1	Eliminate	No Further Action Track 1 Decision Document, ROD
	CFA-28	Fuel Oil Tank at CFA-674 (West)	Track-1	Eliminate	No Further Action Track 1 Decision Document, ROD
	CFA-29	Waste Oil Tank at CFA-664, active	Track-1	Eliminate	No Further Action Track 1 Decision Document, ROD
	CFA-30	Waste Oil Tank at CFA-665, active	Track-1	Eliminate	No Further Action Track 1 Decision Document, ROD
	CFA-31	Waste Oil Tank at CFA-754, active	Track-1	Eliminate	No Further Action Track 1 Decision Document, ROD
	CFA-32	Fuel Tank at CFA-667 (North Side)	Track-1	Eliminate	No Further Action Track 1 Decision Document, ROD
	CFA-33	Fuel Tank at CFA-667 (South Side)	Track-1	Eliminate	No Further Action Track 1 Decision Document, ROD
	CFA-34	Diesel Tank at CFA-674 (South)	Track-1	Eliminate	No Further Action Track 1 Decision Document, ROD

Table D-2. Summary of Potential Release Sites Retained or Eliminated for the OU 4-13 Cumulative Risk Assessment

OU	Site Code	Site Description	Type of Investigation	Eliminate/Retain for COPC Screen?	Reason for Elimination
	CFA-35	Sulfuric Acid Tank at CFA-674 (West Side)	Track-1	Eliminate	No Further Action Track 1 Decision Document, ROD
	CFA-36	Gasoline Tank at CFA-680	Track-1	Eliminate	No Further Action Track 1 Decision Document, ROD
	CFA-37	Diesel Tank at CFA-681 (South Side)	Track-1	Eliminate	No Further Action Track 1 Decision Document, ROD
	CFA-38	Fuel Oil Tank, CFA-683	Track-1	Eliminate	No Further Action Track 1 Decision Document, ROD
	CFA-45	Underground Storage Tank	Track 2	Eliminate	No Further Action Track 2 Decision Document
4-04	CFA-39	"Drum Dock" (CFA-771)	Track-1	Eliminate	No Further Action Track 1 Decision Document, ROD
	CFA-40	Returnable Drum Storage - South of CFA-601	Track-1	Eliminate	No Further Action Track 1 Decision Document, ROD
	CFA-41	Excess Drum Storage - South of CFA-674	Track-1	Eliminate	No Further Action Track 1 Decision Document, ROD
4-05	CFA-04	Pond (CFA-674)	Track-2	Retain for COPC Screen [a]	NA
	CFA-17/47	Fire Department Training Area (bermed) and Fire Station Chemical Disposal	Track-2	Retain for COPC Screen [a]	NA

Table D-2. Summary of Potential Release Sites Retained or Eliminated for the OU 4-13 Cumulative Risk Assessment

OU	Site Code	Site Description	Type of Investigation	Eliminate/Retain for COPC Screen?	Reason for Elimination
	CFA-50	Shallow Well East of CFA-654	Track-1/Track-2	Eliminate	No Further Action Track 1/Track 2 Decision Document, ROD
4-06	CFA-06	Lead Shop (outside areas)	Track-2	Retain for COPC Screen [a]	NA
	CFA-43	Lead Storage Area	Track-2	Retain for COPC Screen [a]	NA
	CFA-44	Spray Paint Booth Drain (CFA-654)	Track-2	Retain for COPC Screen [a]	NA
4-07	CFA-07	French Drains E/S (CFA-633)	Track-1/Track-2	Retain for COPC Screen [a]	NA
	CFA-12	French Drains (2) (CFA-690)	Track-1/Track-2	Retain for COPC Screen [a]	NA
	CFA-48	Chemical Washout South of CFA-633	Track-2	Eliminate	No Further Action Track 2 Decision Document, ROD
4-08	CFA-08	Sewage Plant (CFA-691), Septic Tanks (CFA-716), and Drainfield	Track-2	Retain for COPC Screen [a]	NA
	CFA-49	Hot Laundry Drain Pipe	Track-2	Retain for COPC Screen [a]	NA
4-09	CFA-10	Transformer Yard Oil Spills	Track-2	Retain for COPC Screen [a]	NA
	CFA-26	CFA-760 Pump Station Fuel Spill	Track-2	Retain for groundwater pathway evaluation [c]	NA
	CFA-42	Tank Farm Pump Station Spills	Track-2	Retain for COPC Screen [a]	NA
	CFA-46	Cafeteria Oil Tank Spill (CFA-721)	Track-2	Retain for groundwater pathway evaluation [c]	NA

Table D-2. Summary of Potential Release Sites Retained or Eliminated for the OU 4-13 Cumulative Risk Assessment

OU	Site Code	Site Description	Type of Investigation	Eliminate/Retain for COPC Screen?	Reason for Elimination
4-10	CFA-01	Landfill I	Track-2	Eliminate	OU 4-12 RI/FS (Track 2 Decision Document)
4-11	CFA-05	Motor Pool Pond	RI/FS	Retain for groundwater pathway evaluation [b]	NA
4-12	CFA-01	Landfill I	RI/FS	Eliminate	Remedial Action (RI/FS Decision Document, ROD)
	CFA-02	Landfill II	RI/FS	Eliminate	Remedial Action (RI/FS Decision Document, ROD)
	CFA-03	Landfill III	RI/FS	Eliminate	Remedial Action (RI/FS Decision Document, ROD)
4-13	CFA-51	Drywell at North End of CFA-640	RI/FS	Retain for COPC Screen [a]	NA
	CFA-52	Diesel Fuel UST (CFA-730) at CFA-613 Bunkhouse	RI/FS	Retain for groundwater pathway evaluation [c]	NA

[a] Site is retained for COPC screening because COPC screening was not conducted in the OU 4-13 RI/FS Work Plan. Screening was not performed in the Work Plan due to a lack of analytical data for the site at the time the Work Plan was issued.
[b] Although the OU 4-13 ROD documents that no further remedial action is necessary at CFA-05, the site is retained for groundwater evaluation in the BRA to address a groundwater characterization data gap.
[c] Contaminant screening was performed in the OU 4-13 Work Plan, so no additional screening for this site is presented in Appendix C.

Table D-3. Dimensions of Sites Evaluated in the BRA[a].

Site	Area (m^2)	Contamination Thickness (m)	Volume (m^3)
CFA-04	6.88E+03	5.5	3.78E+04
CFA-05	7.43E+03	5.8	4.31E+04
CFA-07	1.46E+01	3.5	5.11E+01
CFA-08 Drainfield	1.86E+04	9.9	1.84E+05
CFA-08 STP	5.57E+03	6.2	3.45E+04
CFA-10	8.08E+02	3.05	2.46E+03
CFA-12 (south drain)	1.34E+01	3	4.02E+01
CFA-13	2.50E+01	9.1	2.28E+02
CFA-15	3.00E-01	7.9	2.37E+00
CFA-17/47	1.96E+03	1.7	3.34E+03
CFA-26	9.30E+02	5	4.65E+03
CFA-42	8.36E+01	0.8	6.69E+01
CFA-46	3.32E+01	6.9	2.29E+02
CFA-52	8.40E+00	2.9	2.44E+01

a. These site dimensions were developed from the contaminant nature and extent discussion in Section 4. Only sites that are quantitatively evaluated in the BRA are shown on the table.

Table D-4. Contaminant-Specific Parameter Values.

COPC	MW (g/mole)		Half-life (y)		Kd (cm^3/g)		Solubility (mg/L)		log Kow		log Koc		Air diffusivity (cm^2/s)		Henry's Law Constant ($atm-m^3/mol$)		PUF	
Aqroclor-1254	200		NA		1.50E+03	3	6.00E-01	11	NA		NA		NA		1.00E-03	11	8.78E-03	9
Aroclor-1260	250		NA		7.89E+03	3	6.00E-01	11	NA		NA		NA		1.00E-03	11	8.78E-03	9
Arsenic	75		NA		3.00E+00	2	1.00E+06	e	NA		NA		NA		NA		4.00E-02	8
Benzene	78.1		NA		2.00E-01	2	1.75E+03	4	2.13	4	1.77	4	8.80E-02	4	5.55E-03	4	2.27E+00	9
Benzo(a)anthracene	228.09		NA		1.19E+03	c	9.40E-03	4	5.7	4	5.60	4	5.10E-02	4	1.34E-04	4	1.97E-02	9
Benzo(b)fluoranthene	252		NA		3.69E+03	c	1.50E-02	4	6.2	4	6.09	4	2.26E-02	4	1.11E-04	4	1.01E-02	9
Benzo(g,h,i)perylene	276.3		NA		4.74E+03	c	7.00E-04	5	6.5	5	6.20	5	4.20E-02	6	5.34E-06	5	6.78E-03	9
Chlorodifluoromethane	86.5		NA		1.73E-01	c	2.80E+02	5f	2.16	5f	1.76	5f	9.02E-02	7h	2.97E+00	5f	2.19E+00	9
Di-n-butylphthalate	278.35		NA		1.02E+02	c	1.12E+01	4	4.61	4	4.53	4	4.38E-02	4	9.38E-10	4	8.38E-02	9
Ethylbenzene	106.17		NA		3.00E+00	2	1.69E+02	4	3.14	4	2.56	4	7.50E-02	4	7.88E-03	4	5.93E-01	9
Lead	207.2		NA		1.00E+02	2g	1.00E+06	e	NA		NA		NA		NA		4.50E-02	8
Mercury	200.6		NA		1.00E+02	2	1.00E+06	e	NA		NA		NA		NA		9.00E-01	8
Phenanthrene	178.2		NA		4.23E+01	c	1.00E+00	5	4.46	5	4.15	5	5.80E-02	6	1.59E-04	5	1.02E-01	9
Phenol	94.11		NA		8.64E-02	c	8.28E+04	4	1.48	4	1.46	4	8.20E-02	4	3.97E-07	4	5.40E+00	9
Tetrachloroethene	165.8		NA		7.89E-01	c	1.50E+02	10	2.6	3	2.42	3	7.20E-02	4	1.31E-02	3	1.22E+00	9
Toluene	92.14		NA		1.00E+00	2	5.26E+02	4	2.75	4	2.26	4	8.70E-02	4	6.64E-03	4	9.97E-01	9
1,1,1-Trichloroethane	133.4		NA		3.27E-01	c	1.33E+03	4	2.48	4	2.04	4	7.80E-02	4	1.72E-02	4	1.22E+00	9
Xylenes	106.2		NA		2.50E+00	2d	1.85E+02	4d	3.17	4d	2.59	4d	7.69E-02	4d	7.66E-03	4d	5.70E-01	9
Ac-228	228		7.00E-04	1	0.00E+00	b	1.00E+06	e	NA		NA		NA		NA		3.50E-03	8
Ag-108m	108		1.27E+02	1	9.00E+01	2	1.00E+06	e	NA		NA		NA		NA		4.00E-01	8
Am-241	241		4.32E+02	1	3.40E+02	2	1.00E+06	e	NA		NA		NA		NA		5.50E-03	8
Ba-133	133		1.05E+01	1	5.00E+01	2	1.00E+06	e	NA		NA		NA		NA		1.50E-01	8
Bi-212	212		1.15E-04	1	1.00E+02	2	1.00E+06	e	NA		NA		NA		NA		3.50E-02	8
Bi-214	214		3.80E-05	1	1.00E+02	2	1.00E+06	e	NA		NA		NA		NA		3.50E-02	8
Cs-137	137		3.02E+01	1	5.00E+02	2	1.00E+06	e	NA		NA		NA		NA		8.00E-02	8
Eu-152	152		1.36E+01	1	0.00E+00	b	1.00E+06	e	NA		NA		NA		NA		1.00E-02	8
Pb-212	212		1.21E-03	1	1.00E+02	2	1.00E+06	e	NA		NA		NA		NA		4.50E-02	8
Pu-238	238		8.78E+01	1	2.20E+01	2	1.00E+06	e	NA		NA		NA		NA		4.50E-04	8
Pu-239/240	239	a	2.41E+04	1a	2.20E+01	2	1.00E+06	e	NA		NA		NA		NA		4.50E-04	8
Ra-226	226		1.60E+03	1	1.00E+02	2	1.00E+06	e	NA		NA		NA		NA		1.50E-02	8
Tl-208	208		5.80E-06	1	0.00E+00	b	1.00E+06	e	NA		NA		NA		NA		4.00E-03	8
U-234	234		2.45E+05	1	6.00E+00	2	1.00E+06	e	NA		NA		NA		NA		8.50E-03	8
U-235	235		7.04E+08	1	6.00E+00	2	1.00E+06	e	NA		NA		NA		NA		8.50E-03	8
U-238	238		4.47E+09	1	6.00E+00	2	1.00E+06	e	NA		NA		NA		NA		8.50E-03	8
Zr-95	95		1.75E-01	1	6.00E+02	2	1.00E+06	e	NA		NA		NA		NA		2.00E-03	8

Notes:

NA - Not applicable or not available.

a. Upper-bound values for half-life and molecular weight are assumed.

b. A conservative default value of 0 cm^3/g is assumed.

c. Kd = Koc*0.003 (DOE-ID, 1994).

d. Para-xylene for xylene value was assumed.

e. Values conservatively assumed to be 1.00E+06 mg/L.

f. Chlorodifluoromethane value is not available. Therefore, dichlorodifluoromethane value is assumed.

g. Value not available. Arsenic and mercury values are assumed.

h. Value not available. Trichlorodifluoromethane value is assumed.

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Table D-5: Soil Concentrations for 0- to 0.5-Foot Interval by Site

Soil (0 to 0.5 ft)

(mg/kg or pCi/g)

COPC	CFA-04	CFA-07	CFA-08D	CFA-08STP	CFA-10	CFA-12	CFA-13	CFA-15	CFA-17/47	CFA-42	CFA-05	CFA-26	CFA-46	CFA-52
Aroclor-1254	2.80E+00		6.70E-01		1.40E+00						1.01E+00			
Aroclor-1260					1.30E+00									
Arsenic	7.54E+00													
Benzo(a)anthracene							ND							
Benzo(b)fluoranthene							ND							
Benzo(g,h,i)perylene							ND		ND					
Lead					3.30E+03		ND							
Mercury	1.78E+02													
Phenanthrene									ND					
Ac-228														
Ag-108m						ND								
Am-241						ND	ND							
Ba-133						ND								
Bi-212														
Bi-214														
Cs-137	5.10E 01		1.69E+02			ND								
Eu-152						ND								
Pb-212														
Pu-238														
Pu-239/240			2.90E+00											
Ra-226	1.27E+00						ND	ND						
Tl-208														
U-234	4.28E+00													
U-235	1.70E-01		2.21E-01			ND	ND							
U-238	4.24E+00					ND	ND							
Zr-95							ND							

Notes:

ND: Chemical is a COPC for this site, but was not present in the 0 to 0.5 foot depth interval.

Blank: Chemical is not a soil COPC for this site.

--: Not calculated because COPC was not detected in the 0 to 0.5 foot depth interval.

[a]: Airborne volatile area weighted average concentrations present only at CFA-17/47.

Table D-6: Soil Concentrations for 0- to 4-Foot Interval by Site

12/3/98,
2:30 PM

	Soil (0 to 4 ft) (mg/kg or pCi/g)													
COPC	CFA-04	CFA-07	CFA-08D	CFA-	CFA-10	CFA-12	CFA-13	CFA-15	CFA-17/47	CFA-42	CFA-05	CFA-26	CFA-46	CFA-52
Ac-228														
Ag-108m						ND								
Am-241						ND	5.06E-02							
Ba-133						ND								
Bi-212														
Bi-214														
Cs-137	4.30E-01		1.79E+02			ND								
Eu-152						ND								
Pb-212														
Pu-238														
Pu-239/240			4.24E-01											
Ra-226	1.38E+00						2.29E+00	2.22E+00						
Tl-208														
U-234	3.28E+00													
U-235	1.30E-01		3.44E-01			ND	4.83E-01							
U-238	2.43E+00					ND	2.21E+00							
Zr-95							1.34E-01							

Notes:

ND: Chemical is a COPC for this site, but was not present in the 0 to 0.5 foot depth interval.

Blank: Chemical is not a soil COPC for this site.

Table D-7: Soil Concentrations for 0- to 10-Foot Interval by Site

12/3/98,
2:33 PM

	Soil (0 to 10 ft) (mg/kg or pCi/g)													
COPC	CFA-04	CFA-05	CFA-07	CFA-08D	CFA-08STP	CFA-10	CFA-12	CFA-13	CFA-15	CFA-17/47	CFA-42	CFA-26	CFA-46	CFA-52
1,1,1-Trichloroethane														
Aroclor-1254	1.24E+00	1.34E-01		7.88E-01		7.00E-02		7.00E+00						
Aroclor-1260						6.50E-02								
Arsenic	1.19E+01													
Benzo(a)anthracene								3.15E+00						
Benzo(b)fluoranthene								1.47E+00						
Benzo(g,h,i)perylene								1.79E+00		1.10E-02				
Chlorodifluoromethane														
Di-n-butylphthalate														
Lead			ND			1.65E+02		2.61E+02						
Mercury	7.34E+01													
Phenanthrene										9.39E-03	ND			
Phenol														
Tetrachloroethene														
Ac-228														
Ag-108m			ND				2.89E-01							
Am-241							2.79E+00	3.47E-02						
Ba-133							9.06E-02							
Bi-212														
Bi-214														
Cs-137	3.40E-01		ND	8.89E+01			1.26E+02							
Eu-152							1.25E+00							
Pb-212														
Pu-238			ND											
Pu-239/240				1.70E-01										
Ra-226	2.63E+00				ND			2.94E+00	2.02E+00					
Tl-208														
U-234	1.97E+00													
U-235	1.60E-01			2.22E-01	ND		2.82E-01	3.01E-01						
U-238	2.17E+00						2.15E+00	1.41E+00						
Zr-95								5.36E-02						

Notes:

ND: Chemical is a COPC for this site, but was not detected in the 0 to 10 foot depth interval.

Blank: Chemical is not a COPC for this site.

--: Not calculated because COPC was not detected in the 0 to 10 foot depth interval.

NA: Not applicable. COPC is not volatile.

[a]: Volatiles are detected from 0 to 10 ft bgs only at CFA-17/47; therefore, airborne volatile area-weighting is based on the area of CFA-17/47.

Table D-8: Average Soil Exposure Point Concentrations from 0 to 0.5 ft During Period Year 0 to Year 25

12/3/98, 2:44 PM

Average concentration from 0 to 0.5 ft during period year 0 to year 25 (based on radioactive decay) (pCi/g)

COPC	CFA-04	CFA-07	CFA-08D	CFA-08STP	CFA-10	CFA-12	CFA-13	CFA-15	CFA-17/47	CFA-42	CFA-05	CFA-26	CFA-46	CFA-52
Ac-228														
Ag-108m						ND								
Am-241						ND	ND							
Ba-133						ND								
Bi-212														
Bi-214														
Cs-137	3.88E-01		1.29E+02			ND								
Eu-152						ND								
Pb-212														
Pu-238														
Pu-239/240			2.90E+00											
Ra-226	1.26E+00						ND	ND						
Tl-208														
U-234	4.28E+00													
U-235	1.70E-01		2.21E-01			ND	ND							
U-238	4.24E+00					ND	ND							
Zr-95							ND							

Notes:

ND: Chemical is a COPC for this site, but was not present in the 0 to 0.5 foot depth interval.

Blank: Chemical is not a soil COPC for this site.